

Practical Training in Nitrogen Planning & Management in Organic Production of Annual Crops

- Virtual Event -

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3-part Workshop

Session 1: Monday, Nov. 27th, 2023, 1-3pm

Session 2: Monday, Dec. 4th, 2023, 1-3pm

Session 3: Monday, Dec. 11th, 2023, 1-3pm

Session 4*: Monday, Dec. 18th, 2023, 1-3pm

**attendance optional*

Registration

tinyurl.com/NitrogenWorkshop



- Cost: \$25*
- **No one will be turned away due to lack of funds. Please contact Rob Straser (rkstraser@ucanr.edu)*
- Must enroll in Session 1-3 (Session 4 optional)
- Limited to 80 participants
- CEUs in progress
 - CDFA-INMTP
 - CCA

About this workshop

In this 3-part series, participants will learn how to estimate nitrogen release from diverse organic sources and translate that knowledge to nitrogen fertilization plans and regulatory reporting requirements. Over the 3 sessions, we will cover the most common sources of nitrogen and complete a nitrogen budget. In session 2 and 4, participants will be able to work on and receive feedback on their own nitrogen budgets.

Who should enroll?

Growers, CCAs, PCAs and other agricultural professionals who are interested in learning about nitrogen management in organic production are encouraged to enroll.

Program agenda

Session 1: Monday, Nov. 27, 2023, 1-3pm

Understanding nitrogen: the nutrient, the role of microbes and the relevance of soil organic matter

Presenters: Daniel Geisseler, Radomir Schmidt and Margaret Lloyd

We will begin with an overview of the sources, transformations and fates of sources of organic nitrogen in soil. Foundational to this, we'll cover the role and dynamics of microbes in nitrogen management, and how that impacts management decisions. Lastly, we'll discuss using nitrogen budgets to understand the sources and proportions of available nitrogen to meet crop demand.

Session 2: Monday, Dec. 4, 2023, 1-3pm

Estimating nitrogen release from organic amendments and contributions from cover crops

Presenters: Patricia Lazicki and Margaret Lloyd

This session will focus on estimating nitrogen release from compost, organic fertilizers and cover crops. In addition, participants will be invited to apply the training to their own operations and receive feedback on the budget calculations during this session.

Session 3: Monday, Dec. 11, 2023, 1-3pm**Putting it all together: Completing a nitrogen budget, synchronizing nitrogen release with nitrogen demand, soil tests, and frontiers in nitrogen science**

Presenters: Daniel Geisseler, Joji Muramoto, Michael Cahn and Margaret Lloyd

In this session, we will address specific aspects of organic soil fertility management in warm season vegetables. Discussions will include crop nitrogen demand and strategies to supply demand, as well as using and interpreting soil testing. Specific references will be made to strategies for complying with forthcoming regulations. We will conclude with a discussion on new frontiers in organic nitrogen management.

Session 4*: Monday, Dec. 18, 2023, 1-3pm

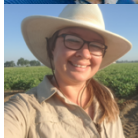
*attendance optional

Grower Panel and Open House

In this session we will have 1-2 growers share their experience managing nitrogen on their farms. Then, we will open it up to questions, share experiences and discuss the nitrogen budget file. Attendees are encouraged to bring their own data to receive feedback.

About the Presenters

Daniel Geisseler is a Cooperative Extension specialist in the Department of Land, Air and Water Resources at UC Davis. Daniel's research and outreach focuses on nutrient turnover and plant nutrition in agricultural systems. He is interested in the effects that different management practices have on nutrient use in California crops and how nutrient use efficiency can be improved, particularly with nitrogen.



Patricia Lazicki is the Vegetable Crops Advisor for Yolo, Solano, and Sacramento Counties, working mainly in tomatoes. Her research interests include soil health, and nutrient management and fertility in organic annual cropping systems.



Margaret Lloyd is the Organic Agriculture and Small Farms Advisor for Yolo, Solano and Sacramento Counties. She runs an active research and outreach program focused on nutrient management and pest management for organic vegetable farms.



Joji Muramoto is an Assistant Cooperative Extension organic production specialist at UC Santa Cruz. His research and extension focus on nitrogen and soilborne disease management in organic cropping systems across the state.



Radomir Schmidt is a program manager at the Working Lands Innovation Center at the UC Davis Institute of the Environment. As a soil microbiologist, Radomir conducts research on the effects of specific farming practices (organic amendment application, enhanced rock weathering, cover cropping, no-till systems) on carbon sequestration and greenhouse gas fluxes in soils, and on the roles of microbial communities in soil health improvement and maintenance.



Michael Cahn is an irrigation and water resources Farm Advisor for UC Cooperative Extension in Monterey County. His research and extension program focuses on irrigation efficiency, nutrient use of crops, and protecting water quality. He led the development of CropManage, an online decision support tool for irrigation and nutrient management.

For more information, contact Rob Straser: (rkstraser@ucanr.edu) or Margaret Lloyd (530-564-8642, mglloyd@ucanr.edu).

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